5

10

ABSTRACT

The present invention leverages a lossless pixel palettization scheme to locally compress portions of at least a two-dimensional image. This provides a lossless compression means with a compression ratio comparable with lossy compression means, allowing for efficient data transfers without loss of image information. By utilizing locally-adaptive palettization, two-dimensional pixel information can be exploited to increase compression performance. In one instance of the present invention, a locally-adaptive, lossless palettization scheme is utilized in conjunction with a one-dimensional compression scheme to yield a further increase in compression ratio. This allows for the exploitation of two-dimensional data information along with the further compression of information reduced to one dimension.